

GeDiPNet Cluster 118 -- Enriched Pathways

Pathway enrichment: KEGG + Reactome, upper-tail hypergeometric test, Benjamini-Hochberg FDR-corrected. Fold enrichment = (overlap / cluster gene count) / (pathway gene count / universe size). Top 15 pathways per cluster by q-value. See scripts/build_cluster_enrichment.php on gedipnet.bicnirrh.res.in. Data as of: 2026-10-07 03:30:09. · Rows: 15 · Generated: 2026-10-07 10:06:11

Pathway	Source	Overlap Genes	Overlap Gene Names	Pathway Gene Count	Cluster Gene Count	Fold Enrichment	P-value	FDR Q-value
Hormone signaling	KEGG	15	DRD2, GNRH1, LHB, PRL, PRLR, DRD3, IGF1, OXTR, CCK, DRD1, PDYN, PENK	219	37	22.23	3.328e-17	1.626e-14
Neuroactive ligand-receptor interaction	KEGG	13	DRD2, GNRH1, LHB, PRL, PRLR, DRD3, OXTR, CCK, DRD1, PDYN, PENK, AGTR1	370	37	11.40	3.332e-11	5.349e-9
Cocaine addiction	KEGG	7	RGS9, DRD2, SLC6A3, TH, FOSB, DRD1, PDYN	49	37	46.37	1.130e-10	1.606e-8
Dopamine receptors	Reactome	3	DRD2, DRD3, DRD1	5	37	194.76	2.680e-7	1.549e-5
Amphetamine addiction	KEGG	5	SLC6A3, TH, FOSB, DRD1, PDYN	69	37	23.52	2.042e-6	8.947e-5
Prolactin signaling pathway	KEGG	5	LHB, PRL, PRLR, TH, INS	71	37	22.86	2.355e-6	1.015e-4
FoxO signaling pathway	KEGG	6	IGF1, IL6, CAT, HOMER1, INS, CDKN1B	133	37	14.64	2.889e-6	1.205e-4
Prolactin receptor signaling	Reactome	3	PRL, PRLR, GH1	12	37	81.15	5.810e-6	2.144e-4
Growth hormone receptor signaling	Reactome	3	PRL, PRLR, GH1	14	37	69.56	9.572e-6	3.238e-4
PI3K-Akt signaling pathway	KEGG	8	PRL, PRLR, IGF1, IL6, GDNF, INS, CDKN1B, GH1	361	37	7.19	1.110e-5	3.658e-4
Interleukin-10 signaling	Reactome	4	CXCL8, IL1RN, IL6, LIF	47	37	27.63	1.237e-5	4.004e-4
Peptide ligand-binding receptors	Reactome	5	CXCL8, CCK, PDYN, PENK, AGTR1	106	37	15.31	1.696e-5	5.218e-4
Alcoholism	KEGG	6	DRD2, SLC6A3, TH, FOSB, DRD1, PDYN	188	37	10.36	2.109e-5	6.258e-4
Synthesis, secretion, and deacylation of Ghrelin	Reactome	3	IGF1, INS, GH1	19	37	51.25	2.521e-5	7.214e-4
Cytokine-cytokine receptor interaction	KEGG	7	PRL, PRLR, CXCL8, IL1RN, IL6, LIF, GH1	298	37	7.62	2.932e-5	8.176e-4